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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/582,959	06/15/2006	Hitoshi Takamatsu	740165-428	1480

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ROBERTS MLOTKOWSKI SAFRAN & COLE, P.C.
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EXAMINER

KRUER, STEFAN

ART UNIT	PAPER NUMBER
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3654

NOTIFICATION DATE	DELIVERY MODE
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02/22/2010

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No. 10/582,959	Applicant(s) TAKAMATSU ET AL.	
	Examiner Stefan Krueer	Art Unit 3654	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 December 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 - 5 and 9 - 10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 - 5 and 9 - 10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 June 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1 - 5 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claims 1, 3 and 5, Lines 3; 3, 14 and 23; and 16, respectively, commonly recite as amended the modifier "...metallic..." that is not supported by the specification, in that though structures of elements are reviewed, materials of construction are evidently not of consideration.

Applicant's assertion that the hatch marks of Figure 3 indicate a material of construction of a lock gear in support of said modifier is not persuasive.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1 – 5 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1, 3 and 5 commonly recite as amended "during operation of their lock mechanism" is indefinite, wherein "operation" can include an engaging as well as a disengaging of said lock mechanism and is therefore indefinite.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1 – 2, 5 and 9 – 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ebner et al (5,788,176) in view of Ono et al (6,113,022).

Re: Claims 1 – 2, 5 and 9 – 10, Ebner et al disclose a webbing retractor (Fig.'s 1 – 1A) comprising:

- a retracting shaft (12) for retracting a webbing belt (14) for restraining an occupant and rotatably mounted in a frame (10);
- a lock mechanism (16, 32, 40, 42, 44 & 48) which includes an annular lock gear (32) concentrically provided with respect to an axis of rotation of said retracting shaft with ratchet teeth (depicted, not numbered) being formed at an outer peripheral face of the lock gear and a lock plate (16) pivotably mounted on the frame and movable into engagement with the ratchet teeth of the lock gear (via teeth of 12, Fig.'s 5 – 6, Col. 5, L. 62 – Col. 6, L. 8), and which is structured to be able to prevent rotation of the retracting shaft in a webbing pulling-out direction by the lock plate being engaged with the lock gear;
- a pretensioner mechanism (18 – 20, 22, 24, 26 & 28) coupled to an end portion of the shaft, and which is structured to be able to forcibly rotate the retracting shaft in a webbing retracting direction;
- a force limiter mechanism (30) which includes a torsion bar having one end portion (50) coupled to the retracting shaft (at 52), and which is structured to be able to absorb a rotating force of the retracting shaft in the webbing pulling-out direction when the rotation of the retracting shaft in the webbing pulling-out direction is prevented by the lock mechanism; and

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- said pretensioner mechanism which includes a sleeve (axial extension of 32) coupled to the other end portion of the torsion bar, and which is structured to be able to forcibly rotate the retracting shaft in a webbing retracting direction via the sleeve,
- wherein the sleeve of the pretensioner mechanism is integrally and concentrically connected to the lock gear of the lock mechanism such that the sleeve and the lock gear form a single, one piece member.
- wherein the sleeve is formed in a cylindrical shape coaxial with the lock gear, and an inner peripheral face of the sleeve is knurled (to accept knurled end portion of torsion bar, Col. 4, L. 61); however,

Ebner et al are silent with respect to their annular lock gear as being metallic and said gear remaining concentric with respect to their axis of rotation during a locking operation of their lock mechanism.

Attention is directed to Ono et al who teaches his lock gear (34, Fig.'s 8 – 9 and alternatively 18, Fig.'s 2 - 3) remaining concentric with their axis of rotation (6) during operation of their lock mechanism (26, Fig's 2 – 4 & 9 and alternatively, 42 - 44, Fig. 5, respectively), wherein their ratchet teeth (34a, Fig. 9 and alternatively 18b, Fig. 2, respectively) formed at an annular outer peripheral face of their lock gear (for 34a, note relation to an “inner annular peripheral face” for clutch disk 30).

It would have been obvious to one of ordinary skill in the art to modify the reference of Ebner et al with the teaching of Ono et al to utilize a lock gear (18) and locking mechanism (42 – 44) as known in the art for impeding unwinding of a belt spool “... in a vehicle-sensitive and/or belt webbing-sensitive manner...” of Ebner et al without requiring a radial deflection of said lock gear thereby maintaining concentricity of said lock gear and said axis of rotation during a locking operation for reduction of flexural stressing of cantilevered componentry for enhanced service life.

However, Ono et al are silent with respect to a material of construction of their lock gear.

It would have been obvious to one of ordinary in the art at the time of the invention was made to fabricate the lock gear as disclosed by Ebner et al of metal, since it has been held to be within the general skill to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. In re Leshin, 125 USPQ 416.

Further with respect to **Claim 9**, and the claim language referring to "... *to be able to be engaged... to be able to prevent... to be able to absorb... to be able to forcibly rotate*", intended use and other types of functional language must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. In a claim drawn to a process of making, the intended use must result in a manipulative difference as compared to the prior art. In re Casey, 152 USPQ 235 (CCPA 1967); In re Otto, 136 USPQ 458, 459 (CCPA 1963).

Claims 3 – 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ebner et al in view of Ono et al and in further view of Nagata et al (6,354,528).

Ebner et al disclose a retracting shaft, pretensioner- and locking mechanisms, a force limiter including a torsion bar, a sleeve of their pretensioner having an inner periphery comprising a knurled surface, wherein said sleeve is integrally connected at an axial center portion of the lock gear of the lock mechanism such that the sleeve and the lock gear form a single, one piece member, and a clutch plate (22) that transmits a rotating force of a wheel of said pretensioner to said sleeve; however,

Ebner et al are silent with respect to their pretensioner mechanism having a rack.

Ono et al are silent with respect to a pretensioner mechanism.

Nagata et al teach their pretensioner mechanism having rack (130, Fig. 14) which is provided on their piston (146, 132) that moves within their cylinder (136) by receiving gas pressure, as well as a pinion (104) which is disposed coaxially with their retracting shaft, a force limiter including a torsion bar and an inner peripheral face of their sleeve is knurled, in total comprising a pretensioning device as known in the art.

It would have been obvious to one of ordinary skill in the art to modify the invention of Ebner et al and Ono et al with the teaching of Nagata et al to utilize a pretensioner mechanism having a rack as known in the art.

Response to Arguments

Applicant's arguments filed 3 December 2009 with respect to **Claims 1, 3 and 5** have been fully considered but they are moot in view of new grounds of rejections.

The rejections of the previous office action were in response to the claim language.

Applicant's arguments are primarily based on the commonly amended claim language applied to the prior art of record.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Rees et al (6,460,935) are cited to a webbing retractor having pretensioner mechanism coaxial with locking mechanism, wherein the pretensioner mechanism (16,

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having pulley 10) is coaxial of their lock gear (14) with which it forms a compact arrangement through mounting on a common sleeve (17) and said arrangement is complemented by a spring clutch (19, 18) and rack (21).

Nagata et al (6,626,388) is cited for reference of a webbing retractor having a pretensioner mechanism coaxial with a locking mechanism concentrically mounted with respect to an axis of rotation of a retracting shaft and comprising an annular lock gear with ratchet teeth being formed on an outer peripheral face, said pretensioner mechanism further having a sleeve coaxial of said lock gear, coupled to an end of a torsion bar of a force limiter mechanism and integrally connected to said lock gear.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stefan Kruer whose telephone number is 571.272.5913. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Q. Nguyen, can be reached on 571.272.6952. The fax phone number for the organization where this application or proceeding is assigned is 571.273.8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866.217.9197 (toll-free).

/Stefan Kruer/
Examiner, Art Unit 3654
5 February 2010

/John Q. Nguyen/
Supervisory Patent Examiner, Art Unit 3654